REMARKS

Claims 1-15 are pending in the present application. Claims 1-15 have been rejected. The Examiner is respectfully requested to reconsider and withdraw the rejections in view of the amendments and remarks contained herein.

The Applicants thanks the Examiner for the indication of allowable subject matter in Claims 2, 8-12, 14 and 15 if rewritten to overcome the rejections under 35 U.S.C. 112, second paragraph set forth in the Office Action and to include all of the limitations of the base claim and any intervening claims.

Claims 1-6, 8-12 and 14-15 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicants regard as the invention. Each of the informalities noted by the Examiner has been addressed for placing the claims in compliance with Section 112, second paragraph. Reconsideration of these rejections is thus respectfully requested.

Claims 1, 3-7, and 13 are rejected under 35 U.S.C. 102(b) as being anticipated by Reid-Green (U.S. Patent No. 4,423,481). Reconsideration of this rejection is respectfully requested for the following reasons.

Each of the rejected claims is directed to "an off-line feed rate scheduling method" related to off-line feed rate for reduction of machining time and enhancement of machining accuracy in CNC machining. In contrast, the '481 patent is related to a method of approximating the path of a tool for machining CAM. Thus, as a general proposition, the recited method and the method described in the cited patent are distinct.

In the cited reference, the constraint value is referred to as the value of the distance between the curved portion and a straight-line portion kept within a

predetermined value while altering the curved shape of the CAM to the straight-lined path of the tool. In contrast, the constraint variable, as for example as recited in claim 1, refers the reference cutting force or reference machine surface area which is the reference for feed rate scheduling, and the object of feed rate scheduling is to control the feed rate in order for a value of reference coding force or reference machine area to occur. Thus, claim 1, and the claims dependent therefrom, employ a different methodology that is not taught in the cited reference.

At column 3, lines 9-45; and column 2, lines 15-38, the '481 patent discloses that the distance between the mathematical curved surface of a CAM and the line segment connecting two points on the curved surface of the CAM is to be made less than a value "d". The term "cutting edge" of the '481 patent is used for explaining that the cutting edge of the tool moves to make the CAM configuration. In ME Z-map of the disclosed method, the node moves in accordance with the movement of the tool. Hence, the concepts of the two respective are methods remarkably different.

At column 14, lines 5-19, the '481 patent discloses that the moving angle or feed rate of the table may be controlled by the difference of the rotational speed of the motor. Again, in contrast with the cited reference, calculating a feed rate is not calculating feed rate simply from the motor speed, but also calculating a feed rate in which the reference cutting force or the reference machine surface area occurs.

At column 13, lines 53-57 of the '481 patent, instructing feed rate refers to giving an order of speed from the controller to the motor. In contrast, the process for inputting a feed rate to the NC code is modifying the feed rate of the NC code into an optimum value. Again, there is no similar teaching in the cited reference.

In Figure 1 of the '481 patent, 100-142 represents a path of tool or a CAM configuration machine according the path of the tool. ME Z-map of the disclosed

and claimed method of the present application is for calculating a cutting configuration through a machine simulation with regard to the NC code therefore precisely simulating the change in workpiece depend upon movement of the tool.

In view of the numerous differences between the methods recited in claims 1, 7 and 13, as amended, it is respectfully submitted that '481 patent is insufficient to anticipate the rejected claims under 35 U.S.C. § 102. For similar reasons, claims 3-6 which are dependent on claim 1 are also not anticipated. Reconsideration and withdrawal of present rejection under 35 U.S.C. § 102 is thus respectfully requested.

Applicant acknowledges that citation to the article referenced on page 21, lines 21-27, has not been considered by the Examiner. A proper Information Disclosure Statement submitting a copy of the article as cited in the application, will be filed under a separate letter for consideration by the Examiner.

CONCLUSION

It is believed that all of the stated grounds of rejection have been properly traversed, accommodated, or rendered moot. Applicant therefore respectfully requests that the Examiner reconsider and withdraw all presently outstanding rejections and objections. It is believed that a full and complete response has been made to the outstanding Office Action, and as such, the present application is in condition for allowance. Thus, prompt and favorable consideration of this amendment is respectfully requested. If the Examiner believes that personal communication will expedite prosecution of this application, the Examiner is invited to telephone the undersigned at (703) 668-8000.

Pursuant to 37 C.F.R. §§ 1.17 and 1.136(a), Applicants hereby petition for a one (1) month extension of time for filing a reply to the outstanding Office Action and submit the required $60 extension fee (small entity) herewith.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit Account No. 08-0750 for any additional fees required under 37 C.F.R. § 1.16 or under 37 C.F.R. § 1.17; particularly, extension of time fees.

Respectfully submitted,

By: _____

Terry L. Clark, Reg. No. 32,644
P.O. Box 8910
Reston, Virginia 20195
(703) 668-8000

TLC/dab